

PROSTHETIC SPINAL DISC NUCLEUS WITH ELEVATED SWELLING RATE

Abstract of the Disclosure

A method of manufacturing a prosthetic spinal disc nucleus. The including forming a hydrogel core from a hydrogel material in a natural state. The hydrogel material in the natural state is characterized by a natural swelling rate. The hydrogel is treated in an alkaline solution having a pH of at least about 8. This treatment transitions the hydrogel core from the natural state to a treated state characterized by an elevated swelling rate. The elevated swelling rate is greater than the natural swelling rate. The resultant, treated hydrogel core forms at least a portion of a prosthetic spinal disc nucleus that is otherwise sized for insertion into a spinal disc nucleus cavity. In one particular embodiment, the hydrogel core is inserted into a constraining jacket. Another aspect of the present invention relates to a prosthetic spinal disc nucleus including a hydrogel core having the elevated swelling rate.